

Claims

1. Method for direct electric heating of a pipeline to contribute to removal or hindrance of plugs of ice and optionally hydrates, characterized in that the heating takes place to a temperature above the ice melting point, but below the hydrate melting point.
2. Method according to claim 1, characterized in that the heating takes place such that a zone of ice having thickness of at least 5 mm closest to the inner wall of the pipeline will melt, such that the permeability through the pipeline is resumed or maintained, such that chemical injection or depressurization become feasible methods for plug removal or hindrance of plug formation of ice and hydrates.
3. System for direct electric heating of a subsea pipeline (1) that conducts hydrocarbons, which pipeline can be blocked by plugs of ice and hydrates, which system comprises a vessel (2) or another device having means with capacity for delivery of sufficient current, a riser cable (3) extended for contact between the vessel and the pipeline, two subsea connections (4) in the lower end of the riser cable, two DEO-cables (5) connected to each subsea connection (4) in the first end and the pipeline (1) in the second end (6) and extended such that a section of the pipeline is situated in between, such that a current circuit can be formed from the vessel (2) down through the riser (3), through the first subsea connection (4) and the first DEO-cable (5) and its connection (6) to the pipeline, through the section of the pipeline, and back to the vessel (2) through the second connection (6) to the second DEO-cable (5), through the second DEO-cable, the second subsea connection (4) and the riser cable (3), characterized in that the system is dimensioned such that ice that is formed can be melted in a zone of at least 5 mm from the inner wall of the pipeline, but the system is not dimensioned such that hydrates as such can be melted.
4. System according to claim 3, characterized in that the vessel (2) is equipped to extend the riser cable down to the pipeline and having the riser cable connected to the subsea connections (4).